

NEWSLINE

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NNSA's Brooks lauds partnership in nonproliferation

By Elizabeth Campos Rajs
NEWSLINE STAFF WRITER

Ambassador Linton Brooks, NNSA's new deputy administrator for Defense Nuclear Nonproliferation, came to the Lab for two days this week to see first-hand what Livermore does, as well as to send a message that he values the strategic partnership with the national labs.

"What I've been doing while I've been here is mostly listening and trying to get a first-hand sense of some of the areas the Lab is working in support of my programs," Brooks said Thursday. "There's \$120 million or so in work that Livermore does in direct support of nonproliferation that comes through me. So it just seemed

to me that I needed to come out very early because the partnership with the labs is so hugely important to me in Washington."

Although he has been associated with the national laboratories on and off for the last 20 years in a variety of capacities, he said he wanted to "come out in my new hat and refresh my memory."

In addition to Livermore, Brooks visited the Pacific Northwest National Laboratory earlier this week and has plans in January to visit Los Alamos and Sandia national laboratories.

Prior to joining the NNSA seven weeks ago, Brooks was Vice President and Assistant to the President for Policy

See **BROOKS**, page 7



JULIE KORHUMMEL/NEWSLINE

Linton Brooks (center) gets an overview of the Lab's work in biodetection from AD Wayne Shotts (right) and Fred Milanovich.



Peter Beiersdorfer



David H. Munro



Karl van Bibber



Siegfried Glenzer

Lab physicists named APS fellows

By Elizabeth Campos Rajs
NEWSLINE STAFF WRITER

Four Lab physicists have been named fellows of the American Physical Society.

Peter Beiersdorfer of V Division, Siegfried Glenzer of the National Ignition Facility, David Munro of X Division, and Karl van

Bibber of the Physics and Advanced Technologies Directorate are among the 190 new fellows named this year. Each year, no more than one-half of one percent of the current APS membership are elected to the status of fellow.

See **FELLOWS**, page 8

DNA diagnostic technique provides sharper tool for cancer detection

By Stephen Wampler
NEWSLINE STAFF WRITER

A DNA diagnostic technique developed by Laboratory scientists is expected to provide a valuable new tool to improve cancer diagnosis.

The advance is described in a paper published this month in the journal *Proceedings of the National Academy of Sciences*.

With this discovery, researchers can detect mutations in individual cancer cells by specific identification and by making numerous copies of the DNA in the genes important for cancer progression in each cell.

In addition to its use in cancer diagnosis, the Livermore technique could also be employed to genetically screen plants for agricultural uses, to genetically evaluate birth defects, and for applications in basic cell research, LLNL biomedical scientist Jim Tucker said. Another possible use

See **DNA**, page 8

NIF construction site sets new record for safety

By Anne M. Stark
NEWSLINE STAFF WRITER

On Dec. 14, the National Ignition Facility construction site set a record of one year and more than one million hours without a single lost workday injury.

"This record exceeds by a wide margin previous site records and is the result of a strong team effort and serious commitment to safety by the Laboratory, Jacobs Engineering, our contractors and contractor employ-

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HOME Campaign closes at \$1.3 million

Employees raised more than \$1.3 million to give to community charities and non-profit agencies in this year's HOME Campaign.

The fund-raising campaign, called HOME, for Helping Others More Effectively, is held each November and December. Employees contribute money to charities of their own choice through monthly payroll deduction and/or onetime check donations.

"The Lab's HOME Campaign continues to make



a difference in the Tri-Valley Area," said David Rice, president of the Tri-Valley Community Foundation, an umbrella agency that funnels HOME Campaign dollars to dozens of charities within the Tri-Valley area. "This is a tremendous gift the Lab gives to the community."

This year's campaign marks the fourth consecutive year in which employees raised more than \$1 million. The total amount, \$1.308 million, sur-

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Whither
Deterrence?

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Access changes
to southwest Lab

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Fun With Science
needs you

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LAB COMMUNITY NEWS

Weekly Calendar

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Monday
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The **Laboratory is closed** today and Tuesday for the Christmas holidays.

Wednesday
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The **South Cafe will be closed** through Jan. 1. During this time, the Central and West Cafes will be open for breakfast service. The West, Central and Roadrunner cafes will be open for lunch service, operating their normal business hours and offering a modified menu. All cafes will resume their regular hours of operation and service on Jan. 7. For online menus, see https://www-ais.llnl.gov/llnl_only/docs/bsd/food/menu/menu.html. Contact: Mishell Pendleton, 2-0105.



LLESA and the American Red Cross are again partnering to save lives through another **blood drive**, to be held in Bldg. 415 on Jan. 7, 10 a.m. - 4 p.m. and Jan. 8, 9 and 11, 7:30 a.m. to 1:30 p.m. Appointments may be scheduled in advance at <http://www.beadonor.com> (company code: LLNL) or by calling Mandy Lewis at 510-594-5211. If your schedule does not permit you to make an appointment, the Blood Bank will work you into the schedule when you drop in. Eligibility questions should be directed to the American Red Cross at 1-800-448-3543.

...

As part of a lecture series hosted by Chemistry & Materials Science by NIF technical and program leaders on "The Materials and Chemistry of NIF," Jack Campbell will discuss, "**Optical Materials for High-power Lasers**," on Jan. 8, at 10:30 a.m. in the Bldg. 235, room 1090.

...

Winter quarter **Russian language classes** will begin Jan. 7, for beginning, intermediate, and advanced students. Cost for 14 weeks of instruction is approximately \$700. Contact: Judy Nelson, 2-6535 or nelson9@llnl.gov, for more information, schedules, and registration forms.

Giving to others



JULIE KORHUMMEL/NEWSLINE

Engineering's holiday card fund raised more than \$3,000 for the Senior Services Center, which will buy food certificates and food baskets. Shown here: Maureen Gandara Swinbank of the LARPD (center), joined by Lab employees Joan Gigliati (left) and Cheri Johnson (right).

Set Christmas trees out today for pickup

Lab gardeners will pick up Christmas trees that were decorated for the holiday at LLNL facilities. The trees will be chipped and used as a soil amendment around the site. Hazards Control requests that holiday trees be removed from Lab facilities by close of business today.

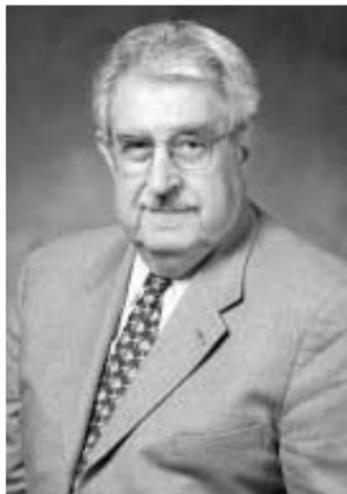
Trees for pick-up need to be placed at the nearest street curbside. Trees cannot be picked up from parking lots, pathways, alleys, etc. Discarded trees will be picked up on Wednesday morning. Please, no ornaments or wrapping paper. Remove



as much tinsel as possible.

With your help, the holiday tree pick-up will reduce the Lab's disposal costs, conserve resources, assist in meeting UC performance measure goals regarding waste diversion, and provide a usable end product for landscaping at LLNL. Employees with questions, suggestions or ideas regarding waste diversion at LLNL are encouraged to call

the Earth Hotline (E-ARTH or 3-2784).



Thoughts on computing

Charles Herzfeld, well known for his role in setting up the ARPAnet, which was the forerunner of the Internet, spoke at the Lab recently. He discussed how computing has transformed the last 50 years and will continue to cause large changes in the world in his talk entitled, "Thought About the Futures of Computing."

IN MEMORIAM

Kenneth R. Walden

A memorial service for Lab retiree Kenneth R. Walden will be held at 1 p.m. Saturday at the Elks Lodge in Livermore. Walden, who passed away on Sunday, was 75.

Born in Plant City, Fla., Walden moved to Livermore in 1965. He worked at the Lab for 22 years in the automotive fleet as a driver for the Director's Office.

"My dad's most memorable quote was, 'I'm going to tell your mama,'" recalled his son, Ken Walden. "He said it to everyone and he said it all the time."

Walden is survived by his son Ken Walden of Livermore, who works at the Lab; daughter Pat Fontes of Oakley; and three grandchildren. He was preceded in death by his wife, Mary, in 1982.

Contributions in his memory may be made to the Elks Lodge or Veterans of Foreign Wars in Livermore.

Newsline

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Dial 16 to access the paging system on-site.

AROUND THE LAB



CGSR conference explores the future of deterrence

By Don Johnston
NEWSLINE STAFF WRITER

Policy, science and technology experts from the U.S. and Western Europe met at the Laboratory recently to discuss the future of nuclear deterrence in a workshop sponsored by the Center for Global Security Research.

The conference was the culmination of a series of meetings held this year under CGSR's Global Security Futures Project to discuss "Whither Deterrence?: Stability Strategies for the Future/Implications for Nuclear Weapons."

"We're not here to predict the future, but to understand the forces in play and try to shape them," said Ron Lehman, CGSR director and host of the conference, in his remarks opening the two-day concluding workshop. "We're not seeking consensus but clarity."

Lehman said the methodology behind the exploratory workshops is "to pose specific questions that will define what we know, what we do not know or cannot agree on and what is needed to resolve unknowns."

The series of workshops brought together specialists from U.S. government agencies, national laboratories, research universities, research centers and institutes and industry as well as a representative from France and the United Kingdom to discuss what global security threats might exist and what role deterrence might play in the world of 2015 to 2020.



MICHAEL ANTHONY/TID

Former Lab Director Mike May (center) was among the participants at 'Whither Deterrence: Stability Strategies for the Future/Implications for Nuclear Weapons.'

Participants in the workshops were divided into three working groups: Threats, Scenarios and Transforming Events, chaired by Michael Nacht of the University of California; Policy and Diplomacy, chaired by Leon Sloss of the Washington Institute, and Weapons Operations and Infrastructure, chaired by Bob Barker of the Laboratory.

The first group drew up four possible scenarios for 2015 ranging from a world of nuclear giants similar to the Cold War, global terror and regional wars, to "dynamic cooperation," or a world at peace. While it was generally agreed that dynamic cooperation was the most desirable scenario, most participants agreed the future would hold some combination of elements from each of the scenarios.

The Policy and Diplomacy group grappled with the implications of future scenarios on nuclear, biological and chemical arms agreements, the role of international organizations such as NATO, SEATO, UN and IAEA and the role of U.S. military and security agencies.

Discussion in the Weapons, Operations and Infrastructure group looked at what technologies might be available in 2015 and what kind of nuclear and conventional weapons posture might be needed to thwart evolving future threats. The role of the aging stockpile and how it might be adapted to meet future defense needs was also discussed.

Jay Davis, former head of the Defense Threat Reduction Agency and a CGSR National Security

Fellow, gave a presentation on the "Grand Challenges of Counter Terrorism."

James Schlesinger, former secretary of Defense, chaired the meeting's concluding plenary session. Other participants included Sir Michael Quinlan from the United Kingdom and Theresa Delpech from the French Commissariat d'Énergie Atomique (CEA). Director Bruce Tarter also participated in the concluding discussion. Scientists from Sandia and Los Alamos national labs also attended.

Carl Poppe and Eileen Vergino of CGSR organized the Livermore conference. A report on the workshops will be posted on the Web at <http://cgsl.llnl.gov/>

New access route to southwest area of the Laboratory

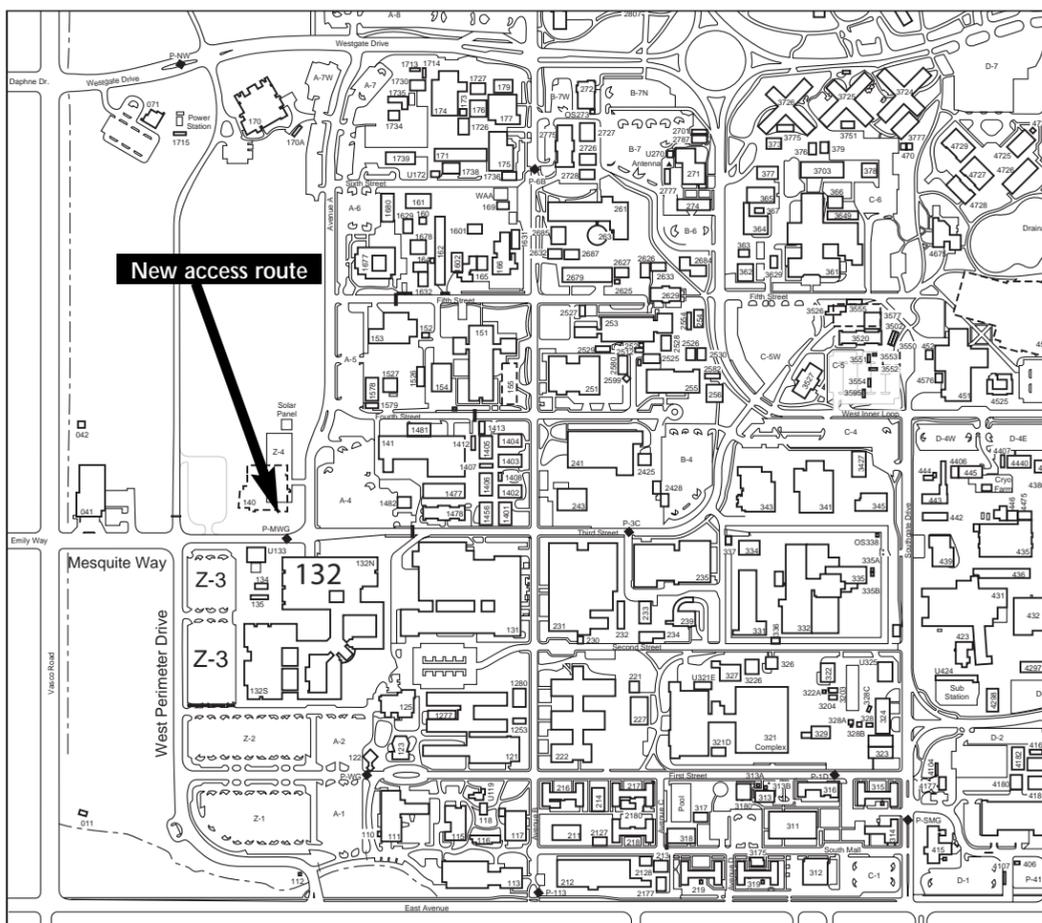
Beginning Wednesday, the gate on Mesquite Avenue near the northwest corner of Bldg. 132 will be open 24 hours a day to allow Laboratory personnel easier access via Avenue A to the West Cafeteria, Bldg. 132 South, and the Protocol Office.

Presently when visiting these locations, Laboratory personnel must leave the Laboratory property and re-enter through the LLNL Southwest Entrance. The changes will improve traffic safety and enhance physical security on site.

Note: Employees will not be able to enter the Lab via Vasco Road and Mesquite.

The new gate configuration requires the entire Southwest quadrant of the Laboratory to be designated a Property Protection Area on a full-time basis, to include all facilities and parking areas. Previously, general public access was allowed during regular work hours. Badges are now required at all times.

Employees are also reminded that since this is now a Property Protection Area around the



This site map shows new access routes along Avenue A to the southwest portion of the Lab.

clock, they must comply with the corresponding Controlled Items restrictions. Alcoholic

contact Dick Van Slyke at 3-8792 or the Security Help Desk at 222.

beverages, binoculars, telescopes, and poisonous or corrosive materials are prohibited at all times in Property Protection Areas without a Controlled Items Permit. Personal cameras may be secured in vehicles but not used, and are no longer permitted within any facility in the southwest quadrant of the Laboratory.

The Safeguards and Security Department is prepared to assist you with the coordination of any special events and activities that require the use of the facilities in this area. Special arrangements can be made to accommodate such Laboratory-sponsored events as Family Days, the LLNL 50th anniversary celebration, Science on Saturdays, and any other event that previously did not require a badge to participate. In all other cases, a badge will be required to enter the area.

For assistance, or if you have any questions,

NIF

Continued from page 1

ees,” NIF Project Manager Ed Moses said. “More importantly than the record, the NIF team is going home everyday to be with family and friends free from serious injury.”

This record was set during a period of intense activity this past year that included completion of conventional facilities construction, installation of the cluster 3 beampath as well as successful completion of many other key NIF milestones.

A good measure, and widely recognized standard of the number of injuries, is the OSHA Total Recordable Frequency Rate (TRR).

Eighteen months ago, NIF managers were seeing injury rates in the double-digit figures. The NIF Project took key steps to ensure that calendar year 2001 would not be a repeat of 2000, and this effort has paid off.

Through intense teamwork and commitment, the situation has turned around. This year the injury rate has been reduced more than a factor of six to an average injury rate of 1.8 in more than 1.1 million hours worked at the NIF construction project. The TRR of 1.8, including a three-month period when it was zero, made the NIF’s safety record far better than the averages for this type of work. The state and national safety record is 9.5 and 8.9 respectively.

“We can build NIF and do it safely,” Moses said. “Safety requires us to be ever vigilant. This year’s success gives us confidence that with a continuing team effort, a strong safety commitment and continuous improvement, we will have a workforce that is free of injury.”

An important step leading to this improvement was



JACQUELINE MCBRIDE/TID

NIF construction members are celebrating a million hours of safety.

to tap the commercial market for safety expertise. Large-scale construction safety management is not an LLNL core competency. Several companies have safety records that are considerably better than the national average on projects and the Laboratory partnered with them.

The Laboratory accessed safety expertise through DuPont’s George Stalnaker, who has more than 27 years of experience in private sector construction with a renowned safety record. He was tapped last year to become the NIF site safety consultant and he has been located on site full time since November 2000.

“I had construction safety experience to add to the mix and we put it to work at NIF,” Stalnaker said. “We turned the safety record around by doing things we knew in DuPont and in the private sector to be successful on construction projects.”

Stalnaker and LLNL’s Arnold Clobes, NIF Site Safety Council chairman and Beampath Infrastructure System Integration manager, said NIF line managers were key and instrumental in making the changes.

“We broadened the safety operation into a management process and procedure,” Clobes said. “Everyone at the line management levels knows this is really important.”

Clobes said Laboratory and Jacobs line managers were not only instrumental in setting the safety standards and getting the message out, but took other measures as well. These included increased site presence, initiating an effective safety rewards and recognition program, participating in safety leadership training, and carrying out effective weekly audits and

assessments to measure the pulse of the site and make corrections as necessary.

“There are a lot of good ideas on improving safety and in the NIF site environment we strive to make the best ideas a part of our everyday work experience,” Clobes said. “The improvements are broadly based — there are no silver bullets.”

This has been a great team effort by not only line management, but LLNL and Jacobs safety support as well. ES&H Team 2 and the DOE OAK team were very helpful in the process.

“There’s been a change in attitude about improving safety,” Stalnaker said. “This kind of top-to-bottom cultural change is at the heart of our approach to safety, and is one big reason NIF is seeing such vast improvement in the numbers.”

ISM X-FILES / by John Maduell

Sponsored by the LLNL ISM Rollout Implementation Team

<p>Is your Xmas tree safe?</p> <p>This scenario from the Lessons Learned files is based on an article in the NFPA Journal.</p> <p>An electrical short in a string of lights was the culprit in a Christmas tree fire that severely damaged a single family home.</p> <p>Fortunately, there were no injuries or loss of life.</p>	<p>What Happened</p> <p>A woman and her daughter heard a popping sound coming from their living room. On checking, the mother found the top two feet of the Christmas tree ablaze. The fire spread quickly.</p>	<p>Outcome</p> <p>The fire caused \$50,000 in structural damage and \$100,000 in content loss.</p> <p>Efforts to put out the fire with a chemical extinguisher were unsuccessful.</p>	<p>Recommended action</p> <ul style="list-style-type: none"> Get a fresh tree. Keep it in a water stand. Locate the tree away from fireplaces, and other heat sources. Space lights apart to avoid overheating. Make certain the electrical cords on the light sets are not frayed. Limit the time the lights are lit. Do not leave lights on when you are not at home. Take the tree down as soon as it is no longer needed. Don't dispose of the tree by burning it in a fireplace. <p>Curbside pickup is an excellent method of disposal.</p> <p>SLY the Safety Fox</p>
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Technical Meeting Calendar

Friday 21 **INSTITUTE FOR GEOPHYSICS & PLANETARY PHYSICS**
 “Measuring Neutron Star Radii” by Robert Rutledge, Caltech. Noon, Bldg. 319, room 205 (badge required). Contacts: Chris Mauche, 2-7017, or Josie Morgado, 4-5201.

Tuesday 8 **CHEMISTRY & MATERIALS SCIENCE**
 “The Materials and Chemistry of NIF,” by Jack Campbell, discussing optical materials for high-power lasers. 10:30 a.m., Bldg. 235, room 1090 (uncleared area). Contacts: Tomás Díaz de la Rubia, 2-6714, or Lisa Rose-Webb, 2-5609.

Friday 11 **MATERIALS SCIENCE & TECHNOLOGY**
 “A Model for Instability Growth in Accelerated Solid Metals,” by Jeff Colvin, High Energy Density Experimental Sciences Program. 3:30 pm, Bldg. 235, room 1090 (uncleared area). Coffee and cookies will be served at 3:20 p.m. Foreign nationals may attend if an appropriate security plan is on file. Contact: Thomas E. Felter, 2-8012.

Monday 14 **CENTER FOR APPLIED SCIENTIFIC COMPUTING**
 “Terascale Simulation of Trade Cumulus Convection” by David Stevens. 10 a.m., Bldg. 451, room 1025 (uncleared area). Contacts: David Stevens, 2-7649, or Leslie Bills, 3-8927.

Friday 18 **INSTITUTE FOR GEOPHYSICS AND PLANETARY PHYSICS**
 “Cosmic Dimples : Where Next for Galaxy Clusters?” by August Evrard, University of Michigan. Noon, Bldg. 319 , room 205 (badge required). Contact: Adam Stanford, 3-0613.

The deadline for the next Technical Meeting Calendar is noon, **Wednesday, Jan. 9**. Please note there will be no Newsline published on Dec. 28 and there will be no calendar items published in the Jan. 7 issue.

Send your input to tmc-submit@llnl.gov. For information on electronic mail or the news-group llnl.meeting, contact the registrar at registrar@llnl.gov.

NEWS OF NOTE



Wanted: Presenters to have Fun With Science

If you have a background in science, enjoy talking to kids and want to help promote science and math in schools, the Science & Technology Education Program and Public Affairs Office need your help.

STEP and PAO recently joined forces on Fun With Science and hope to be able to take the program to more schools and communities in 2002.

However, there are not enough presenters to fill all the requests. Currently, eight schools are on a waiting list, said Liselle Clark, who organizes the program in the Science & Technology Education Program (STEP). In addition to taking the program to more schools, the Public Affairs Office would also like to expand the program to include special events at the Visitors Center.

"We have requests to go out at least two times a week, but we haven't been able to fill many of those requests," Clark said. "Students get really excited about the program when we come and the teachers really appreciate it."

Frances Foy, an engineering design associate in Mechanical Engineering working on NIF and the lead of the Integration Design Team, did her first Fun With Science presentation nearly 10 years ago. She's been hooked ever since and now goes out to schools about once a month to do Fun With Science presentations.

"I like working with kids. I like seeing them get excited about science," Foy said. "In



SCOTT WILSON/PUBLIC AFFAIRS

Elvis Spencer (standing, right) is one of the regular presenters of Fun With Science, in which Lab employees venture out to promote science and math to students.

my job, I'm on a computer designing parts so I really enjoy the hands on part of the presentations."

In addition to the introduction to science that this program provides, it is also a great community relations and outreach tool, said Karen Kiernan, PAO manager for special projects.

"We see lots of opportunities for this program — and we are also thinking of creating a place in the Visitors Center for us to hold Fun With Science presentations."

All the materials and equipment as well as the basics for doing approximately 20 demonstrations are provided to presenters. A training session is

also offered for new presenters. STEP has a Fun With Science van and will provide an account number for the employee's time.

An overview of the program will be offered at the Visitors Center from noon to 1:30 p.m. on Tuesday, Jan. 8 for anyone interested in finding out more about Fun With Science. STEP and PAO are hosting a pizza lunch for all those who plan to attend. Please RSVP to Liselle Clark, 2-5468.

"STEP needs your help. More applications from schools come in every day. You do provide a valuable educational experience for students and teachers appreciate your efforts. Schools in the valley and foothills don't have access to a lot of high quality science programs such as FWS and are grateful when FWS comes to their sites," Clark said.

The presentations are offered throughout the Tri Valley, East Bay and central valley, Clark said. Presenters decide how many Fun With Science presentations they want to do a year. Some do as many as once a month and others are only able to do one a year.

Don Correll, STEP director, adds "Fun With Science is one the better examples of employees contributing to the local and regional community by sharing the Lab's wealth of information through personal contacts with students and teachers. Last year FWS presenters engaged over 5000 students and 300 teachers."

For more information on Fun With Science, contact Karen Kiernan, 3-9051, or Dick Farnsworth, STEP's K-12 education manager (2-9631, farnsworth1@llnl.gov). Or check out the Website at www.education.llnl.gov/fws

HOME

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passes last year's total of 1.26 million.

"This campaign shows how aware our Laboratory employees are of the needs in their community, and how much they want to help," said Wayne Shotts, Associate Director for the Lab's Nonproliferation, Arms Control and International Security Directorate, which sponsored the campaign.

For 27 years the Laboratory has staged its HOME Campaign to raise money for local nonprofit agencies, as well as umbrella groups such as United Way and the Tri-Valley Community Foundation. In the last seven years that Lab has steadily increased the amount of money donated, raising almost \$7 million.

Local agencies such as Tri-Valley Haven for Women, Shepherd's Gate and Tri-Valley Animal Rescue are among those who benefit greatly from the HOME Campaign.

"We are very pleased with the outcome of this year's campaign," said Roger Werne, who chaired the effort. "I want to thank all those employees who contributed, as well as the employees in NAI and the Computation Directorate who helped put everything together."

"The HOME Campaign proves that anyone can make a difference in someone's life."

Computation sponsored this year's Run for HOME and will chair the 2002 campaign.

Total HOME contributions:



\$1,308,630



Directorate	Total Employees	No. of Contributions	\$ Donated	% Participation
Energy & Environment	316	151	\$61,700	48%
Computation	987	344	\$158,200	35%
Safety, Security & Environmental Protection	990	382	\$112,561	39%
Physics & Advanced Technologies	395	213	\$81,323	54%
Defense & Nuclear Technologies	401	246	\$98,122	61%
Chemistry & Materials Science	471	225	\$102,346	48%
Laboratory Services	1359	583	\$147,916	43%
Engineering	2090	779	\$312,836	37%
NIF - ICF	193	110	\$40,769	57%
CFO	94	60	\$14,904	64%
NAI	250	147	\$62,993	59%
Director's Office	159	104	\$33,164	65%
Administration	290	126	\$29,325	43%
Biology & Biotechnology Research	232	103	\$25,036	44%
Supplemental Labor	N/A	91	\$22,024	0
Others	N/A	20	\$5,410	0
TOTAL	8,223	3,684	\$1,308,630	44%



CLASSIFIED ADS

See complete classified ad listings at
<https://www-ais.llnl.gov/newsline/ads/>

AUTOMOBILES

1995 - Pontiac Bonneville SE, V6 3.8 liter, Leather, CD Stack, Electric Seat, C.C., Compute Mileage. \$5,500/BO 209-599-2299

1995 - Jeep Cherokee Sport, 4door, V-6, good tires, good brakes, AM/FM CD, 2WD, hunter green, auto-trans, air, 100,000 miles, good condition, \$5,500. 925-736-7507

1994 - Ford Taurus Wagon. Car in great in-outside shape but needs new engine or rebuild existing. \$2000/obo 209-599-9721

1973 - V.W. Super Beetle. Good Cond. Leaks Oil; needs Rear Main Seal. \$1800 OBO 925-447-8557

1991 - Mitsubishi 3000GT sports-car, racing red, 110K runs great, a/c, leather, automatic, power steer/etc., smart/safe tires, exc. cond \$7,000 925-254-7656

1991 - Ford Bronco. Eddie Bauer. 86k miles. Excellent condition. Immaculate. \$6,500 obo. 925-516-3768

1994 - Toyota Corolla 4dr sedan, Automatic Transmission, Air Conditioning, PS, PB, Power Locks, Cruise Control, excellent condition, \$5500 925-447-7287

1997 - BMW 528 I, cobalt Blue, new tires, brakes, cd changer, lthr, 88k, fully loaded, exc cond. \$24,500 209-869-5362

1973 - Oldsmobile Toronado Classic. One owner. Always garaged. 142K mi. Excellent condition. Must see to believe. \$2950. 925-447-9969

1995 - Honda Civic EX, \$4,995 obo, Excellent Condition, V-Tech Engine, Black with charcoal interior, Power Windows, Locks, and Mirrors, Sunroof. 209-918-1437

1985 - Nissan Maxima 6 cyl, 5-speed manual, 235K miles, recent smog, well-maintained, all records, \$1700 obo 925-447-6719

1989 - Pontiac Bonneville LE, power door-locks & windows, excellent 3.8 liter engine and trans, new paint & many new parts - \$1900 925-829-1794

1976 - Cadillac Fleetwood Brougham in great mech. shape, a good one for a car Buff. 209-825-4632

1993 - Honda Civic EX, 2-dr, 5 spd, A/C, Stereo w/ CD, approx 150k mi, drives well, great commuter/student car. \$4700 obo 925-736-9452

1993 - RX-7 R1 Yellow, Great Shape, Rare, 0-60 in 4.7 seconds, after market upgrades. Interior very clean, special black cloth race seats. \$20,000 obo 925-449-1578

1997 - Subaru Impreza Outback Sport, 78K miles, \$10,500. See www.goldino.net/subaru for complete details. 925-371-1607

1972 - White Mother of Pearl 72 Grand Prix, Black Vinyl Top, Black Interior w/ power seats & windows. \$8,000 OBO. 209-832-0976

1997 - Mitsubishi Eclipse GS-Turbo = Fully loaded, leather, sunroof & spoiler. Black. 75K miles. \$12,000 obo. 925-243-1232

1986 - Toyota van, 135K miles, tan color. Runs well. \$3000 OBO. 925-455-1719

1982 - Datsun 280ZX. Needs a good home. \$600 925-449-8304

1930 - model A all parts to put back original or hot rod. 209-522-4427

1988 - Van Custom Ford Econoline, V8, AC/HT, fold down bed, TV/VCR 130K. Great for kids, camping,

sporting events. 4K OBO. 925-449-3152

1994 - BMW 325i 4 door, 5 spd, sunroof, premium sound, new brakes, clutch, tires, always tuned. a steal at \$10,500. 925-240-7019

1989 - Volvo 740 Turbo sedan, 145K miles, very clean interior, good commuter car. \$4,000 obo 209-833-7257

1999 - BMW 328i Convertible. Excellent condition. Older woman owner. 23K miles. Always garaged. \$34,500 Evenings: 925-443-6176

1995 - Ford Explorer, 2D Sport, 4WD, roof rack, running boards, tow pkg, ABS, loaded and great condition, 69K miles and Goodyear tires! \$9000 925-447-6707

1990 - Cadillac Seville, Maroon. All Options inc Leather, CD, Spoke Wheels. New Cooling System. Great condition w/149K. \$4,200 or B/O. 209-848-4849

1991 - Suburban, 3/4 ton Silverado 4x4. White w/Gunmetal Grey. All Options inc Rear A/C. 94k flawless! Must see. \$8,900 209-848-4849

RK Sport exhaust system. Single to quad exhaust system for Cavalier. Chrome Oval Tips. Used, in good condition. New \$250, asking \$100 OBO. 925-373-1057

1994 - Mustang 5.0 V-8 5-speed, Flow Masters, Power Everything, 17 in Rims, Tint, CD-Polk/JL Audio Speakers, Excellent Condition! \$6000 OBO. 925-634-4834

1987 - Toyota Camry DX, 4 door, 4 cylinder, auto trans, ac, AM/FM/CD stereo, 98k miles, tires - 10k mi., very good condition, \$2,300 obo. 209-833-9055

1992 - 1992 Saturn SL2, 183K Commuter miles, 5-Speed, Power Pkg., Newer tires, Well maintained, Good condition, Runs great! \$2,500/BO. 209-823-5435 209-823-5435

1992 - Geo Prism (Toyota Corolla twin) 4 Door, Auto, A/C 94K, pretty metallic blue, good condition- new tires, timing belt, \$2450 or BO. 925-447-7070

1985 - Honda Prelude - power steering and brakes, AM/FM stereo cassette, sun roof, tilt wheel, air conditioning (AC does not work). \$800 or best offer. 925-846-9243

1995 - Subaru Legacy LS Wagon, AWD, loaded, 132K, great cond, well maint, original owner. \$6700 (phone-ty only) tedn777@yahoo.com 650-390-8449

1992 - Ford Explorer 4WD, 4.0L Automatic, Eddie Bauer Edition, Dark Green/Tan leather, Class III Hitch, new tires, shocks, Factory CD \$5800/offer 925-240-6496

1994 - Nissan Pathfinder SE-V6(Champagne), 4X4, AT, Air, Sunroof, 91K miles, Good Condition, \$8750./OBO 925-447-8916

1969 - VW Bug Good condition, rebuilt engine 6000 miles. Replacement parts included. \$1800.00 or OBO 925-513-6509

1999 - Chevy Blazer, 4.3L V6, 4X4, 34K miles, full bumper to bumper GM Warranty, Metallic Silver, Loaded all electric, cd audio system, asking \$16,000. 209-567-0312

1984 - Mercedes 190E. Green w/tan leather interior. Sunroof, Auto, AC, 160K miles, Great condition for age. \$3K obo. 925-249-1640

1995 - Chevrolet Tahoe, Blue, 4X4, V8, 5.7 liter, 74K miles, Great condition, \$14,500 OBO 925-449-1509

1998 - Acura Integra-GS, 2D, manual, A/C; All power features;

AM/FM Stereo, CD, Front Air Bags, ABS; 48K highway miles; excellent condition; \$15K. 510-727-0373

1991 - Explorer, 119k miles, one owner, maint. file available. \$4750. 925-447-3780

AUTOMOBILE ACCESSORIES

Torque wrench (unused), induction tune-up dwell meter, induction timing light. Make offer 925-292-7799

Camper Shell & Carpet Kit Black Aluminum & Blue/ Gray Fits 6ft. Chevy Short Bed \$150/Obo. 209-836-3709

GM Truck Accessories: Flowmaster exhaust, K&N intake system, Head light controller, Fog light controller, Bed mat. Call for descriptions and prices. 209-365-0412

Jeep Wrangler Sahara rims, tires and bumpers. Brand-new. Vehicle being customized. \$650 all or will sell separately. 925-961-9711

Tires 265/75 16 inch mounted on 6 lug aluminum alloy rims. \$275 925-447-4611

Carburater, Delco 2BBL for 65 Buick. \$35 925-443-6766

Toyota pickup or Tacoma factory aluminum rims 15 inch like new and tires 31x10.5 good tread. \$200 obo 925-449-4262

Ground Control lowering springs for 1997 Mitsubishi Eclipse. \$100.00 925-243-1232

Tire chains. Purchased years ago for LR78-15 tire size (Suburban) and never used. \$25. 925-447-6221

Draw-Tite under the bumper receiver for 1995 Mitsubishi truck \$40 209-833-3785

FLARED FENDERS for Dodge Truck RED w/all fasteners over \$500.00 NEW, asking \$200.00 209-529-0431

JOEY-BED, Truck Bed Slider, makes reaching items a BREEZE. \$850.00 NEW, asking \$450.00 209-529-0431

15 inch Six bolt TRUCK WHEELS, steel, all 4 for \$50, or 2 for \$30 925-447-7070

1988-93 Mustang GT alloy wheels, 4 each with tires. \$120 OBO Joey 925-455-8238

2001 Chevy Z71 1500 Factory Alloy wheels and tires with 10,000 miles \$400/OBO 925-371-2737

Ski Rack, Barrecrafters, adjustable/lockable w/keys, fits vehicles w/rain gutters, holds 4 or more sets of skis/poles, \$60 on eBay, \$30. 925-837-4542

SUV pet divider, hardly used, adjustable, previously used in a Chevy Blazer, \$30 925-606-0755

Set of Saab 17 inch wheels, never used. Great for spares or replacement. \$300 obo. 925-249-1640

Custom wheels/tires uni-lug fits any truck. 15x10 Corona Wheels. Remington tires P295/50R15 w/less than 1K mi. \$2K new. \$500 obo. 209-239-3918

BICYCLES

BMX Freeagent/Raceway bike 1yr. old Chromoly frame, 3 piece crank, sealed bearing, pads \$300 209-835-2416

BOATS

Sail, mast and boom for sail board. Like new \$300 OBO 925-455-4208

1977- 9 ft Sea Ray bowrider. Very good condition! V8. I/O motors. Call at (209) 463-9900 to see the boat. \$3,395. 209-832-2790

1977 Delta Jet boat, 350 Olds, Jacuzzi jet, new upholstery & wood frames, \$2100 firm 209-848-4849

ELECTRONIC EQUIPMENT

Nintendo64 Game Console, 3 controllers, additional memory cards, Tremor pack, 7 games including PD. Perfect, ideal for Christmas. Best Offer 925-292-7799

PowerMac 6500, new 17 inch monitor, stylewriter color printer. Excellent Condition. Make Offer. 925-443-6271

Dell Pentium3, 933 MG, ATI graphics board, cd-rom, 17in monitor, 56K modem, XP operating sys, more. Great Cond. Cost 1300 Sell 750/BO 209-825-7966

iMac 700Mhz, 256 RAM, 60 Gig HD, CD-RW, 10/100T, 56K Modem, 3 months old, \$1250.00 209-239-6353

Car Radio, AM-FM, not stereo. \$10 925-443-6766

GIVEAWAY

Free-Commodore 64 Computer. Disk drive, Printer & Extra Keyboard. 925-447-3221

HOUSEHOLD

GREAT HOLIDAY GIFT :Large Multipurpose Safe: 700lbs, High Speed Electronic or Dial Lock, 60x30x50 inchs. \$400 obo Would like to sell before 21 DEC 510-539-3728

New barber set, Smith Corona word processing electric typewriter, Sears heavyduty sander, scroll saw, or make offers. 925-292-7799

Hunter green sofa; pillow-top ultra soft fabric. Very comfortable and attractive. Only 2 yrs. old with Scotch Guard protection. Like new! \$400 OBO 925-455-4208

Full set Noritake Running Free Ironstone type dishes - light and dark blue. Serving dishes included. No chips or cracks - Full set - \$300. 925-989-6199

Cal Spa Beautiful Blue marble large spa almost new. Best offer. 510-305-9791

Childs Desk 5 drawer. light oak color, exc. cond. \$40 OBO pg.61664 925-776-5612

Oak entertainment center 60x66x22 dark finish no particle board very nice beveled cut glass doors & lockable video drawer. \$600.00 o.b.o 209-574-0939

Student desk 80 by 24 inches, 2 pedestals, 1 with drawers, 1 with book shelves \$50.00 925-443-2245

Papa-San chair, bamboo frame with a 4 foot diameter pad, \$50.00 925-443-2245

Maytag, washer and dryer almond color. \$175.00 OBO. Must sell 209-824-0227

Baby bassinet, navy and white, excellent condition, \$49.00. 925-606-7889

Kirby G-4 Vacuum with power drive \$400 BO Band saw \$125 209-521-0509

Kenmore Washer/Dryer Gas Harvest Gold Good Condition. \$160. 209-833-1719

Excellent Condition Frigidaire Full size Washer&Dryer 2yrs old hardly used 250.00 each or 400.00 for both Must See, steal of a deal! 925-355-9144

Three oak captian style swivel bar stools \$75.00 each. Two oak swivel bar stools \$35.00 each. 925-516-7849 925-516-7849

LOST & FOUND

Lost sentimental gold wired earring w/Amethyst and a diamond on top. If found please call me. 925-439-7394

MISCELLANEOUS

Classic Transformer/Go-Bot toys in unopened boxes. Great for Christmas. 925-292-7799

OLYMPIC TICKETS and Accommodations for 2. Many skating and ski events included. Weekend at a B&B and a week in shared ski condo included. \$2400 OBO. 925-838-3977

Cleaning Tank - Like New \$75 925-606-0480

5 disk DVD Bruce Lee the Master collection 510-305-2182

6in. Jointer/Planer, RIGID, used only twice. \$225.00 OBO. 209-952-5048

Hooked on Phonics, complete with cassette tapes, study guides, games, its all here. Cost \$300 new, asking \$50. 925-829-1794

FREE elegant glass Christmas ornament hand carved with your own personal message. 209-830-8643

MOTORCYCLES

1989 - Yamaha FZR600 street bike. Black/Red, Fox shock, Yoshimura pipe. Sharp and runs great. Price - \$2000 925-449-7155

MUSIC INSTRUMENTS

Suzuki violin, 1/4 size, Wolf violin headrest (1/2 size), Violin Strings. Buy your youngster a holiday present that lasts. 925-292-7799

Crate practice amp. Distortion and clean channels. Great condition. 209-824-0227

PETS & SUPPLIES

PAINT filly, A.P.H.A., beautiful & smart, prof trained, cutting, very athletic, calm, must sell \$4000.000. O.B.O 925-371-5371

Baby Parakeets, hand tame, \$10.00. 925-447-8557

Large bird cage with 1 inch bar spacing suitable for a cockatoo or macaw. Playtop included. \$200 OBO 209-321-7203

Cockatiels, 2-3 months old. Greys, Lutinos & Pearls. Friendly & tame. \$35.00 each. Eves 925-606-7128

Eclectus Parrot Babies for sale. Raised in our home. Gorgeous, extremely sweet and gentle. Call for more information 925-371-8283 925-449-4303

African Grey Parrots - babies, raised in our home. Several ages available. Call for more information 925-371-8283. 925-449-7966

RECREATION EQUIPMENT

AB-Doer II abdominal exerciser. Like new, less than 1 year old. Paid \$100/asking \$35 OBO 925-371-0558



As a Lab employee. . .

you are responsible for knowing the protective action terminology that may be used in an emergency.

Familiarize yourself with these concepts:

Shelter

The Shelter-In-Place announcement means:
Shelter: Stay inside your building or go inside the nearest building.
Shut: Close doors and windows.
Listen: Listen for further instructions over the emergency paging system or Lab Emergency Radio 1610 AM. *Avoid using the telephone unless you have a life-threatening emergency.*

Evacuation

The Evacuation announcement means:
Secure classified material in a safe and expedient manner.
Exit the building per your building evacuation plan unless directed otherwise by the emergency announcement.
Report to the designated Assembly Point and wait for further instructions.

Call Emergency Preparedness 4-LLNL

BROOKS
Continued from page 1

Analysis at the Center for Naval Analysis, a federally funded research and development center in Virginia. During the first Bush administration, he served as assistant director for Strategic and Nuclear Affairs at the U.S. Arms Control and Disarmament Agency as well as in the State Department as head of the U.S. delegation on nuclear and space talks and chief Strategic Arms Reductions (START) negotiator. Prior to these positions, he was director of Arms Control on the staff of the National Security Council.

In addition to his career in civilian government service, Brooks' 30-year military career included serving as a Navy captain at sea in destroyers, ballistic-missile submarines and attack submarines, culminating as captain of the nuclear-powered attack submarine USS WHALE.

"We are really fortunate to have him as head of NN," said Wayne Shotts, AD for Nonproliferation, Arms Control and International Security. "His mix of technical background and policy administration makes him ideally suited to what we see in NN programs."

During his two-day visit to the Lab, Brooks was briefed on a wide range of nonproliferation topics, including proliferation prevention and arms control, verification and nuclear materials security and counterterrorism and incident response. In addition, he toured several NAI

and Biology & Biotechnology Research Program labs, the Forensic Science Center and the National Atmospheric Release Advisory Center.

"One of the most important things I saw here is this continuum between basic research, which is what you get in the national laboratories, done in an interdisciplinary manner, which can then be focused to a particular problem of proliferation," Brooks said. "That spectrum is more important than the specific projects that I saw. You come to a national lab and if you're not impressed with the science you see, then you're not impressible. You see good science, but what was interesting to me was the way we can relate fundamental science to the practical needs of my program and the broader needs of the country."

During a meeting with NAI employees Thursday, Brooks said he just found out Monday that approximately \$226 million in funding had been added to his budget.

"I am quite pleased with the support we have gotten from the White House in my area. I think what you're going to see is that the FY03 budget will reflect the high priority the administration places on this program," Brooks said.

He also talked about his trip to Moscow three weeks ago with DOE Secretary Spencer Abraham and he cited an agreement they worked out with their Russian counterparts to improve access to MinAtom sites and the formerly secret cities which will be especially helpful in carrying out the Nuclear Cities Initiative where LLNL is a major player.

See complete classified ad listings at <https://www-ais.llnl.gov/newsline/ads/>

CLASSIFIED ADS



NordicTrac Pro ski exerciser with performance tracking and pulse monitor; good condition! \$50.00 925-455-5273

Snowboard-Morrow 56 inches \$50.00 no bindings installed. Snowboard pants sizes 12-14, several pairs, (lightweight and heavyweight). \$15.00 each. 925-634-0423

Soloflex. Great condition. Attachments included. \$200. 925-516-3768

GOLF CLUBS - Youth left-handed starter set with bag. Metal driver, irons 5, 7, 9 & putter. Excellent condition. \$45.00 925-846-8394

Skies, boots & poles- K2 (195 cm) with Tyrolia Free Flex bindings, Nordica 637 boots (10 1/2 inches), and Reflex taper poles, make offer. 925-443-2271

1991 Kawasaki 650 Stand-up, water box, pipe, plate, stainless steel impeller, 2-ski V&M trailer, clean & fast \$1300 firm 209-848-4849

RIDESHARING

Express your commute, call 2-RIDE for more information or visit <http://www-r.llnl.gov/tsmp>.

Manteca - Rider/Driver needed. Only drive 1 day per week and 1 Friday per month. Hrs 7:45-4:30. 209-823-5085, ext. 2-0643

SERVICES

Manteca - Reliable Pet sitting and Babysitting services. 209-823-5085

Handyman services from electrical problems to bathroom remodel.

el. Free estimates. 925-606-9558
 Professional house cleaning service. Less than you might think! References available. Start the new year clean. 209-836-9082

Mother Goose Daycare/Preschool in Brentwood. Newborn to 6 years. Meals included. 3 years experience. Certified CPR & first aid. Lic# 73403169. 925-634-0939

SHARED HOUSING

Livermore - Approx. 5 minutes from LLNL share 3BD/2BA home full privileges NS/NP close to downtown. \$650.00 a month 1/3 utilities first, last and deposit. 510-305-9791

Livermore - Unfurn rm with semi-priv. bath. Neat, clean home. Kitchen, laundry priv. NS/ND. Util. includ. \$600 mo plus last mo. rent. 10 min. from Lab. 925-447-8698

TRUCKS & TRAILERS

1989 - GMC 3/4 Van Conversion. 102K mi. excellent condition. Captain Chairs, sofabed, custom wood console, table. \$5,900/obo. x29914. 510-252-9596

1992 - Toyota 4 Runner 4X4 SR5 V6, 5 spd. PW, PL, PS, Moon Roof, Run brds, CC, CD/Cass AM/FM, Bug & Roof Guard, K&N. Excellent Maint. Just Smog & Reg \$6500.00 209-463-0457

1989 - GMC S15 Jimmy, 4.6L V6, 123K miles, Auto, PS/PB/PW/PDL/CD, towing pkg, clean int/ext, very good running condition, 1 owner, all records, \$3200/obo. 209-823-8270

1987 - 4Runner, 210K, 4X4,

5spd, A/C, AM/FM/Cassette, 4cyl, EFI, oversize tires, tilt, cruise, plus Yakima rack. \$3500. 925-462-1554

1992 - FORD F250. Over \$5k new stuff! New tires/wheels, paint, campershell, bedliner & carpeted storage kit, brakes & more! \$5,695/obo. 209-832-2790

1992 - Ford F250 Diesel extended cab, 8 Ft Bed, New injectors, clutch, brakes, injector pump. runs great. \$ 7500. OBO. 209-847-8264

VACATION RENTALS

Maui, HI - Kahana Reef oceanfront 1BR/1BA condominium. Beautiful two-island view, ocean-side pool, and BBQs. Low LLNL rates for year-round reservations. 925-449-0761

Kona Hawaii - Ocean view vacation condo in Kona, All i drive. Sleeps 4. 96 steps to the beach. Special rates for lab employees 925-373-0137

SOUTH LAKE TAHOE - 3 Bedroom 2 Bath Chalet, nicely furnished, newly remodeled, all amenities, close to all skiing, Reserve Holidays/Skiing Now! 209-599-4644

Kihei, Maui - Oceanfront, luxury condo w/all amenities. Great view, central location, large pool, tennis courts, BBQ, workout room, low LLNL rates. 925-846-8405

WANTED

Wood book shelf for den. Desire 48 inches wide and 72 inches high. Will consider other sizes. 925-449-9078

Please donate your old trophies to cub scout pack 177. (we will change tops) call at 209-571-3857

Looking for used (running or broke) lawnmower engine for young boys to work on and tinker with, 3hp-5hp. Call for info 925-634-8134

Two Raiders tickets (preferably 1st or 2nd deck) for the 1/6/02 game vs. the New York Jets. 925-443-4988

Wanted: Alto Saxophone. 925-831-9865

computer with printer for boys juvenile home in Stockton would like to have for Christmas. 209-

832-7112

Custom cabinet, to be made for TV and VCR (entertainment center). 209-892-6186

Old Coke machines, pinball machines, and Juke boxes. 925-449-0388

Sewing machine: Pfaff, Viking or Bernina in working condition. Reasonable. 925-449-4963

Bayonets and insignia wanted, US made. 209-835-4281

Stackable washer and dryer 209-236-1754

Outdoor Christmas Lighted 3D deer/buck decorations, working or not. 209-825-5222

Guidelines

Newsline is not responsible for any errors contained in the classified ads. It is up to the employee to proofread his or her ad to make sure it contains the correct data, including the phone number.

Employees are reminded that only car- and vanpool ads may contain Lab extensions. E-mail addresses are not allowed.

Due to space limitations, *Newsline* cannot run ads that are submitted in all capital letters. "Personals" ads are not permitted either.

Employees may submit one ad per category, but may not include the same ad in more than one category.

Ads may only be submitted through the Employee Ads Web Services site <https://www-ais.llnl.gov/newsline/ads/>

Employees are responsible for ensuring the content of their ad is accurate.



THE BACK PAGE

would be a more rapid determination of whether a person has been exposed to radiation.

Livermore biomedical scientist Allen Christian is the paper's lead author. Other authors are Melissa Pattee, Christina Attix, Beth Reed, Karen Sorensen and Tucker. All six are biomedical scientists in the Laboratory's Biology and Biotechnology Research Program.

"Until now, there hasn't been any way of doing DNA testing inside cells with the level of resolution that we have been able to achieve," Tucker said.

"Previous DNA testing techniques couldn't easily, or on a routine basis, tell us which molecular changes were present in tumor cells. Now we have the basic techniques to develop tools to improve cancer diagnosis and cancer therapy," Tucker added.

The Lab scientists have succeeded in applying a technique to the study of cells and tissue that was originally used to evaluate isolated DNA. A patent is pending for their work and at least one company has already expressed interest in licensing the technology. Previously, the best resolution for detecting genetic abnor-

malities inside a single cell was a flawed or missing region of about 1,000 DNA base pairs long, out of the approximately 6.6 billion base pairs in every human cell. The process to find these abnormalities usually took several days.

Now, with the Lab advance, researchers can locate a single flawed DNA base pair within a cell, Tucker said. And the process can be done within a couple of hours.

"This technique could greatly speed efforts to measure the effectiveness of treatments in killing tumors and would improve the ability of physicians to individualize cancer treatments," Tucker said.

For example, when doctors try a particular cancer therapy, they can now evaluate its effectiveness much more rapidly, allowing alternative therapies to be considered earlier in the treatment process.

"The technique can be used to monitor the effectiveness of treatments to see how much of the tumor remains," he said.

Another major application of the technology, according to the Livermore scientist, could be in the area of improving agricultural crops. "Companies are always trying to make better strains of rice, corn, carrots or even Douglas fir trees, but until now they have lacked the rapid DNA diagnostic tests they've needed," Tucker

explained.

In his view, the Lab technique will assist scientists in rapidly identifying which strains of a plant, tree or vegetable have the desired genetic characteristics.

In basic cellular research, the advance could prove useful for determining the genetic composition of bacterial, plant and human cells. The Lab scientists' research expands upon a diagnostic technique known as rolling circle amplification. In this procedure, researchers take a designed sequence of DNA and bring the ends of the DNA together onto a target molecule to be studied.

The two ends of the DNA sequence are joined together to form a circle. Next, an enzyme is used to make a long DNA strand comprised of hundreds or thousands of linear copies of the circular DNA sequence that are joined together.

What LLNL's biomedical scientists have done is to extend the use of the rolling circle amplification technique — which had been used in isolated DNA — to cells and tissue.

The scientists developed a way to eliminate one of the two strands in the double helix of DNA, so that more maneuverability is provided for the enzyme to make copies of the DNA.

FELLOWS

Continued from page 1

The APS recognizes those who have made advances in knowledge through original research or made significant innovative contributions in the application of physics to science and technology.

Peter Beiersdorfer, group leader for Atomic Spectroscopy in V Division, was cited for his "many contributions to precision X-ray spectroscopy of highly charged systems and application of this spectroscopy to plasma and astrophysical problems."

"It's great," he said of the award. "It's a great honor to be selected. I was surprised and very happy when I received the letter two weeks ago."

Beiersdorfer, who joined the Laboratory in 1988, earned his bachelor's and master's degrees in physics at Auburn University and his master's and Ph.D. in plasma physics at Princeton University.

Siegfried Glenzer, an experimental physicist at the Lab, was cited for "the development of Thomson Scattering for the diagnostics of high-temperature inertial confinement fusion plasmas and for important contributions to understanding of plasma waves, atomic physics, and hydrodynamics of hot dense plas-

mas."

"I'm happy about the award," said Glenzer, who was presented his certificate at the annual APS Division of Plasma Physics meeting in November. "It shows people know about your work and think it's important. Some of this work was on Nova. Nova was hard work. It's nice to be recognized for it."

Glenzer, who is the Plasma Physics Group leader in Inertial Confinement Fusion, earned his undergraduate degree and Ph.D. at the Ruhr-Universitat-Bochum in Germany. He has been in the United States since 1994, when he first joined the Lab as a postdoc.

Munro, who has worked at the Lab for 21 years, is a physicist in X Division and is involved in laser fusion target design. He was cited for "seminal contributions to the design of laser-driven Rayleigh-Taylor experiments, and to the analysis and design of shock-timing experiments for cryogenic inertial confinement fusion targets."

"It's a nice recognition both of me and the work we do at the Lab in X Division," Munro said. "It's an honor not only for me, but for the people working with me."

Munro joined the Lab in 1980, shortly after earning his Ph.D. at the Massachusetts Institute of Technology. His Lab career has been focused on laser fusion and until a few years ago, mostly involved designing experi-

ments on Nova. Currently, he is involved in target design work for NIF.

Karl van Bibber, chief scientist in the Physics and Advanced Technologies Directorate, was cited for his "leadership role in an ultra-sensitive search for dark-matter axions, and the conception of other elegant experiments for detection of the axion."

"I was stunned when I heard about it," said van Bibber. "It's a great honor. The dark matter problem is one of the greatest challenges in science, and the award is a tribute to the Lab's commitment to basic research and the efforts of our entire team who have contributed to this experiment."

Van Bibber received his bachelor's and doctorate at MIT, and came to the Laboratory in 1985 from Stanford where he had been an assistant professor of physics. He started the high energy physics and accelerator technology group in 1991, and was the Laboratory's project leader for the construction of the SLAC/LBNL/LLNL B Factory.



Newsline going on hiatus; returns Jan. 7

This is the last *Newsline* for 2001. *Newsline* will return on Jan. 7 with a special edition that will include a section on 50th anniversary activities, as well as the annual year in review.

Please note the Jan. 7 edition appears on a special day. *Newsline* will return to its Friday publication schedule on Jan. 11.

Classified ads will not be published in *Newsline* until Jan. 11. However they will continue to appear on the Web. To ensure your ad

appears in the Jan. 11 edition, you must input that ad Jan. 7 or 8.

Newsline
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